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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/709,094	04/13/2004	Hengsheng Li	040409-01	3093

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EXAMINER
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COCKS, JOSIAH C

ART UNIT	PAPER NUMBER
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3749

DATE MAILED: 08/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/709,094

Applicant(s)

LI, HENGSHENG

Examiner

Josiah Cocks

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 2-5 and 8-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-5 and 8-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 February 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Response to Amendment***

1. Receipt of applicant's amendments filed 2/2/2006 and 5/31/2006 are acknowledged. The amendment filed 2/2/2006 include a listing of claims that failed to comply with 37 CFR 1.121. Applicant was advised of this non-compliance via a letter mailed 4/25/2006. The amendment filed 5/31/2006 does not fully comply with the requirements of 37 CFR 1.121. The examiner notes that that claims 3-5 marked with the status identifier "original" are not original claims, as these claims each include limitations that were not present as originally presented. Claim 3 now recites a band attached with at least one magnet. Claim 4 now recites at least one reed switches and claim 5 now introduces a solenoid operated valve. The additions to these claims have not been underlined as required by 37 CFR 1.121. Accordingly, this amendment is also non-compliant. However, in the interest of advancing prosecution of the application, the amendment has been examined on its merits. Any response to this Office action must include a full listing of claims that fully comply with 37 CFR 1.121.

***Drawings***

2. Applicant was advised in the Office action mailed 11/03/2005 that the drawings originally filed with the application were unacceptable as they included lines that were not uniformly thick and well defined and extraneous machine copy marks. The replacement drawings filed 2/2/006 are regarded to correct the deficiencies previously noted. Accordingly, the replacement drawings have been entered into the application.

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However, newly submitted Figs. 1A and 1B include reference characters that are too small to be legible. Accordingly, the new drawings of Figs. 1A and 1B are objected to by the examiner. Corrected replacement drawings for Figs. 1A and 1B that include legible reference characters are required.

## **INFORMATION ON HOW TO EFFECT DRAWING CHANGES**

### **Replacement Drawing Sheets**

Drawing changes must be made by presenting replacement sheets which incorporate the desired changes and which comply with 37 CFR 1.84. An explanation of the changes made must be presented either in the drawing amendments section, or remarks, section of the amendment paper. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). A replacement sheet must include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of the amended drawing(s) must not be labeled as "amended." If the changes to the drawing figure(s) are not accepted by the examiner, applicant will be notified of any required corrective action in the next Office action. No further drawing submission will be required, unless applicant is notified.

Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and within the top margin.

### **Annotated Drawing Sheets**

A marked-up copy of any amended drawing figure, including annotations indicating the changes made, may be submitted or required by the examiner. The annotated drawing sheet(s) must be clearly labeled as "Annotated Sheet" and must be presented in the amendment or remarks section that explains the change(s) to the drawings.

### **Timing of Corrections**

Applicant is required to submit acceptable corrected drawings within the time period set in the Office action. See 37 CFR 1.85(a). Failure to take corrective action within the set period will result in ABANDONMENT of the application.

If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings **MUST** be filed within the **THREE MONTH** shortened statutory period set for reply in the

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“Notice of Allowability.” Extensions of time may NOT be obtained under the provisions of 37 CFR 1.136 for filing the corrected drawings after the mailing of a Notice of Allowability.

### *Claim Objections*

3. Claim 4 is objected to because of the following informalities: In line 2 “switches” should read “switch”. Appropriate correction is required.

### *Claim Rejections - 35 USC § 112*

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 3-5, 9-14, and 16-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 3-5 are claims that appear to be intended to be properly dependent upon claim 2. Claim 2 introduces an apparatus having certain structural elements. However, these claims 3-5 refer only to the specific structural element of claim 2 that they modify and not the apparatus as a whole. For example, claim 3 refers to “said magnetic object in claim 2.” It is unclear if applicant intends that claim 3 include all the limitations of independent claim 2. As best can be determined, applicant does intend these claims to include all the limitations of claim 2. For the purpose of examination on the merits claim 3 has been regarded as reciting;

“The apparatus of claim 2 wherein the magnetic object is a band attached with at least one magnet.”

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Claims 4 and 5 have examined based on similar claim language. In response to this Office action, these claims 3-5 must be corrected in this manner.

Claims 9-14 and 16-20 include similar issues as those identified for claims 3-5. These claims have also been regarded as intending to refer to the “apparatus” of the independent claim rather than only the specific structural feature modified. For example, claim 9 has been regarded as reading:

“The apparatus of claim 8 wherein the non-manual means comprises:

- a. an electromagnet;
- b. a valve, controlled by said electromagnet, to control gas supply to said heater.”

Claims 9-14 and 16-20 must be corrected in a manner similar to that noted to properly recite the scope of dependency.

### ***Claim Rejections - 35 USC § 101***

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claims 10-14 and 20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 10 recites a magnetic object “attached to said user” which is a limitation that positively recites a part of the human body and accordingly directed to nonstatutory subject matter. See Commissioner Quigg’s notice published in the Official Gazette at 1077 OG 24



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(April 21, 1987). For the purpose of an examination on the merits, this claim has been regarded as merely reciting “a magnetic object”

Claims 14 and 20 recite a handle “operated by said user’s hand” this is also regarded as positive recitation of a part of the human body and directed to nonstatutory subject matter. See Commissioner Quigg’s notice published in the Official Gazette at 1077 OG 24 (April 21, 1987). For the purpose of an examination on the merits these claims have been regarded as reciting a handle that is “manually operable.”

### *Claim Rejections - 35 USC § 102*

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claim 2 is rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent no. 2,169,696 to Hotchkiss (“Hotchkiss”).

Hotchkiss discloses in the specification and figures 1-15 an invention in the same field of endeavor as applicant’s invention and as described in applicant’s claim 2. In particular, Hotchkiss shows an apparatus (see Fig. 1) for controlling gas in a gas burner to achieve desirable timing and volume of heat that is operated either manually by hand or automatically through magnets (see at least page 2, lines 25-47 and page 3, lines 26-45). Hotchkiss further shows that the control device includes a magnetic objects/magnets (electromagnet 54, 34, 36), a sensor board/circuit (Fig. 12), a relay (58), an electromagnetic valve (22), a hand control unit with a

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lever/handle (136), and a magnetic detecting device that includes a switch (see at least page 4, lines 21-54).

In regard to the recitation in the preamble of claim 2 that the apparatus is used for stir-fry cooking, this recitation is considered to be statements of the intended use of the burner (i.e. in functioning for stir fry cooking). It has been held that if the body of a claim fully and intrinsically sets forth all of the limitations of the claimed invention, and the preamble merely states, for example, the purpose or intended use of the invention, rather than any distinct definition of the claimed invention's limitations, then the preamble is not considered a limitation and is of no significance to claim construction. *Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1305, 51 USPQ2d 1161, 1165 (Fed. Cir. 1999); see also MPEP 2111.02. Further, A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). Lastly, a preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claims does not depend on the preamble for completeness but, instead, the process steps of structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).



In this case, the heater and control structure of Hotchkiss operates a gas burner, that would be capable of operating as a burner employed for the intended purpose of stir-fry cooking. Further, as noted above, the device of Hotchkiss includes all the structure in the body of applicant's claims and operates to control the gas burner as recited. Accordingly, applicant's recitations regarding stir-fry cooking are not regarded as limiting and as such, applicant's claims do not distinguish over the device and method disclosed in Hotchkiss.

### ***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 2-5 and 8-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent no. 4,503,502 to Chapin ("Chapin") in view of U.S. Patent No. 6,636,135 to Vetter ("Vetter") and U.S. Patent No. 2,169,696 to Hotchkiss ("Hotchkiss").

Chapin discloses in the specification and Figs. 1-9 an invention similar to that described in applicant's claims 2-5 and 8-21. In particular, Chapin shows an apparatus for controlling gas in a gas burner used for stir-fry cooking that is operated either manually by hand or automatically including a control unit (50) that operates an electrically controlled valve (48), a hand control unit in the form of manual valve (52) that is operated via a handle (see Fig. 1). The electric valve (48), the manual valve (52), and a gas pass channel (see unnumbered fuel line in Fig. 1

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connecting the valves and the burner 10) are contained within a valve box in the stove housing (8) (see Fig. 1 and unnumbered box surrounding the valves).

In regard to at least claims 8 and 15, see heater (10), manual means (52), non-manual mean (28) and controlling means (50). The controlling means is a computer that requires operation by the user at the computer terminal through manipulation of the keyboard (see Fig. 1 and col. 6, lines 22-38). Operation of this computer terminal by a user is considered to render the computer (50) responsive to a user's position as recited.

In regard to claims 14 and 20, note handle that controls valve (52, see Fig. 1).

In regard to claim 21, the system of Chapin is a stir-fry cooking system.

Chapin does not disclose a magnetic control unit that includes a magnet, a sensor board, a relay and a reed switch. Chapin also possibly does not disclose that the electric valve is an electromagnetic valve that includes a solenoid.

In regard to the recitation of a magnetic control unit and the associated structure, the examiner notes that Chapin does disclose that the electrically operated gas valve (48) is responsive to a electric signals from a remote control system, including computer (50) and electronic interface (49), in order to activate and deactivate the valve (see at least col. 6, lines 6-21). However, as noted above, this electric control system is not a magnetic control system with a magnetic object.

Vetter teaches a remotely operated control system for an electrical component that is considered to be pertinent to the problem faced by applicant and identified in Chapin in remotely operating an electric component (i.e. a valve), and thus analogous art. In Vetter, the control system is a magnetic control system that includes a magnet (6), a reed switch (5) that functions

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as a magnetic detecting means, and control circuitry including a sensor board and relay (see the circuitry illustrated in at least Figs. 2-4). The reed switch is responsive to the magnet which is directed into the vicinity of the switch by a user to provide operation of an electrical component (see at least col. 2, lines 28-65).

In regard to claim 3, the magnet (6) is described as being of "any size and shape" (see Vetter, col. 2, lines 37-38) and includes a cover (11) for aesthetic reasons (see col. 2, lines 53-54). This aesthetic cover (11) with attached magnet (6) is considered to be the recited band with at least one magnet recited.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the control means of Chapin to incorporate the magnetic control means of Vetter as such a control means is recognized in the art to allow for remote control of an electric switch (see Vetter, col. 1, lines 10-15) in a manner similar to the remote control operation of Chapin to enable transmitting of an electric signal to an electronic component. Vetter discloses that his proposed magnetic control desirably allows an operator to transmit the signal without coming into contact with an electric switch (such as the computer 50 of Chapin) as contact with such an electric switch in some situations may be an electrical hazard for the user (see Vetter, col. 1, lines 15-25).

In regard to the recitation of the electromagnetic valve and solenoid, Hotchkiss teaches an electrically operated valve placed in the fuel line of heating device that is considered pertinent to the problem of operating such a valve in a gas cooking assembly addressed both by applicant and Chapin, and is thus analogous art. In Hotchkiss, the electrically operated valve (22) is

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specifically an electromagnetic valve (see electromagnet 54 and page 2, lines 35-47) that operates via solenoid/electric motor (42, see page 1, lines 33-35).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the electric valve of Chapin to incorporate the electromagnetic valve of Hotchkiss for the desirable purpose of providing quick closing of the valve in response to power failure which is particularly obtainable through the use of an electromagnetic valve (see Hotchkiss, at least page 1, lines 14-40).

### *Response to Arguments*

12. Applicant's arguments filed 2/2/2006 have been fully considered but they are not persuasive. As noted above, the prior art now relied upon is considered to disclose all the limitations of applicant's claims.

In regard to applicant's arguments that the magnetic object recited in applicant's claims is distinguished over the electromagnet of Hotchkiss. The examiner notes that the valve (22) and electromagnet (54) are separate structures identified as different elements. As has been noted above, the electromagnetic valve (22) is properly considered to read on applicant's electromagnet valve and the electromagnet itself (54) is properly considered to be the recited magnetic object.

In regard to applicant's arguments considering a lack of a showing of a magnetic detecting device. Such a device is clearly shown in the prior art reference to Vetter.

Accordingly, applicant's claims are not considered to patentably distinguish applicant's invention over the prior art.

*Conclusion*

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

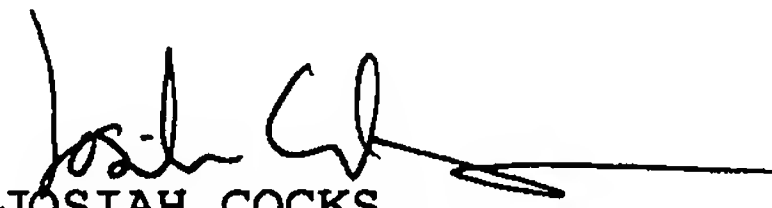
14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Josiah Cocks whose telephone number is (571) 272-4874. The examiner can normally be reached on weekdays from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ehud Gartenberg, can be reached at (571) 272-4828. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jcc  
August 14, 2006



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ART UNIT 3749